Listing of Specification Amendments

At page 12, line 14-page 15, line 23, [¶¶0056-0060 of the published patent application] please amend the specification as follows:

The locking member 32 is shown in FIGS. 17-20 and comprises a tubular stem 60 having a pair of diametrically aligned apertures 62 near its proximal end and having a plurality of radially extending arms 64 at its distal end. The stem 60 is slidably received in the inner shaft 42 of the engagement member 30 with the apertures 62, channels 58 and holes 40 aligned with one another, and a pin 66 is inserted therethrough with opposite ends of the pin secured to outer sleeve 37. Accordingly, the locking member 32 is fixedly secured to the outer sleeve 37 and is movable therewith as the shaft 42 of the engagement member 30 and the outer sleeve 37 are moved longitudinally relative to one another as permitted by the pin 66 moving in channels 58. The arms 64 are slidably disposed in the slots 54 of the engagement plate 44, and locking fingers or tabs 68 (designated 168 in the embodiment of FIGS. 31-33) extend longitudinally, distally from arms 64, respectively.

The spring 34, which is shown in its relaxed state in FIGS. 22-24, is compressed and retained between the proximal end of the stem 60 and the internal ledge 57 of the shaft 42 such that the outer sleeve 37 and the inner shaft 42 are biased longitudinally away from one another such that the locking member 32 is normally disposed in an extended position relative to the engagement plate 44 of engagement member 30 when no actuating force is applied to the tool. In the extended position, the distal end of the outer sleeve 37 abuts the engagement plate 44 and the locking fingers 68 (168 in the embodiment of FIGS. 31-33) are in a longitudinally extended position relative to the engagement plate, in which the fingers 68 (168 in FIGS. 31-33) extend distally beyond the distal face of the engagement plate 44 closely alongside the legs 47 of the engagement protrusions. The distance that the locking fingers 68, 168 extend distally from the distal face of the engagement plate 44 in the extended position may be the same as or substantially the same as the distance between the distal face and the distal edges of feet 48 (designated 148 in FIGS. 31-33). The arms 64 may have distal surfaces disposed in the same plane as the distal face of the engagement plate 44 when the locking member 32 is in the

extended position. The extended position for the locking member corresponds to a locked position for the tool and is shown in FIG. 31 for an alternative insertion and extraction tool 127.

When an actuating force is applied to the proximal end of the tool to cause relative longitudinal sliding movement of the outer sleeve 37 and the inner shaft 42 away from one another, the locking fingers 68,168 are retracted within the slots 54 of the engagement plate 44 in a retracted position for the locking member 32 corresponding to an unlocked position for the tool, as shown in FIG. 32 for the alternative tool 127. In the retracted position for the locking member 32, the locking fingers 68 do not protrude distally from the distal face of the engagement plate 44. The actuating force may be applied via manual squeezing operation of the flange 38 of the outer member 28 and the proximal end of inner shaft 42 or via any suitable handle mechanism coupled with the proximal ends of the outer member and the engagement member. When the actuating force is released, the tool is automatically returned to the locked position and the locking member is automatically returned to its extended position since the tool is spring-biased or spring-loaded to the locked position.

The alignment member 36 is shown in FIGS. 25-30 and comprises a generally convex body 72 having a planar end face 74 with bosses 76 protruding therefrom at equally spaced radial locations about a central axis of the alignment member. The bosses 76 have a configuration to be received in the holes 56 in engagement plate 44 to releasably secure the alignment member to the engagement plate. The bosses 76 can be designed in various ways for releasable engagement in holes 56 including a snap fit, an interference fit or any other suitable releasable connection. The body 72 has an external configuration corresponding to the configuration of cavity 16 of the acetabular component 10 to serve as an alignment or centering guide for the insertion and extraction tool 27. An angled notch or recess 78 is formed along the peripheral edge of body 72 to facilitate removal or detachment of the alignment member 36 from the engagement plate 44.

A method of locking the acetabular component 10 to the insertion and extraction tool 27 involves moving the insertion and extraction tool from the locked position to the unlocked position in response to an actuating force applied at the proximal end of the tool and moving the tool toward the acetabular cup 10 in an axial or longitudinal direction of movement to align the feet 48 (148 in the embodiment of FIGS. 31-33) with the entry portions 22 of recesses 20. Where the alignment member 36 is provided, this is facilitated by inserting the body 72 into the cavity 16 of the acetabular component and rotating the tool, as needed, about its central longitudinal

axis to obtain alignment of the feet 48, 148 with the entry portions 22. Accordingly, the tool is essentially self-guided or self-centered without the surgeon having to engage in trial and error alignment of the feet with the entry portions of the recesses. Continued movement of the tool 27 toward the acetabular component 10 causes the feet 48, 148 to enter and pass through the entry portions 22 into the engagement portions 24 of the recesses 20. The feet 48, 148 will then be disposed in the first ends of the engagement portions 24, with the distal face of the engagement plate 44 in engagement with the face 14 of the acetabular component 10 with the side edges 25 of the engagement portions 24. The insertion and extraction tool 27 is then rotated about its central longitudinal axis in the direction of the second ends of the engagement portions 24, i.e. clockwise for the illustrated embodiment, thusly causing the second ends of the feet 48, 148 to enter the second ends of the engagement portions 24 as represented by FIG. 32. In this position, shoulders 26 are disposed between the feet 48, 148 and the engagement plate 44 to prevent withdrawal of the engagement members 46 from the recesses 20 in the axial or longitudinal direction. The actuating force on the insertion and extraction tool 27 is then removed or released, allowing the tool to return automatically to the locked position, whereby the locking fingers 68, 168 automatically enter the unoccupied portions of the recesses as represented in FIG. 33. An engagement protrusion 46 and a locking finger 68, 168 will be disposed simultaneously in each recess 20 to prevent rotation of the engagement plate 44 relative to the acetabular component 10 about the central longitudinal axis of the tool. In this manner, the acetabular cup 10 will be locked to the insertion and extraction tool 27. In order to unlock the acetabular component 10 from the insertion and extraction tool 27, an actuating force is applied to the proximal end of the tool to move the locking member to its retracted position, causing the locking fingers 68, 168 to be withdrawn from the recesses 20 in the unlocked position for the tool. The tool is then rotated about its central longitudinal axis in the direction of the first ends of the engagement portions 24 of recesses 20, i.e. counterclockwise for the illustrated embodiment, so that the feet 48, 148 are again aligned with the entry portions 22 of the recesses 20. The tool is then moved away from the acetabular component 10 in the axial or longitudinal direction to withdraw the feet 48, 148 from the recesses 20.